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SPECIFICATION FOR STEERING APPLIANCE FOR ARTIFICIAL LIMBS

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SPECIFICATION FOR STEERING APPLIANCE FOR ARTIFICIAL LIMBS

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Indian Standard

SPECIFICATION FOR STEERING APPLIANCE FOR ARTIFICIAL LIMBS

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 20 June 1968, after the draft finalized by the Artificial Limbs Sectional Committee had been approved by the Consumer Products Division Council.

0.2 The formulation of Indian Standards on artificial limbs, prosthetic and orthotic appliances and rehabilitation equipment has been taken up at the instance of the Advisory Committee for Development of Surgical Instruments, Equipment and Appliances, Government of India.

0.3 Steering appliance is a terminal device to be used with artificial limbs. Terminal devices are working accessories to be fitted into the dress or working arm of an amputee of the upper extremity. These devices aid the amputee to perform some of the normal functions of the hand. Steering appliance is used by amputees for driving automobiles.

0.4 This standard is one of a series on terminal devices for artificial limbs. Other specifications published so far in this series appear on 4th cover page.

0.5 This standard is a necessary adjunct to IS : 4534-1968*.

0.6 This standard contains a clause **6.1** which calls for an agreement between the purchaser and the supplier.

0.7 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS : 2-1960†. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard specifies the requirements pertaining to material, shape, dimensions, workmanship and finish for steering appliance terminal device.

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*Specification for adapter for terminal devices, artificial limbs.

†Rules for rounding off numerical values (*revised*).

2. MATERIAL

2.1 The different components of the steering appliance shall be manufactured from the following materials:

Component	*Material*	*Conforming to*
Control cup	Aluminium alloy	Designation A-6 of IS : 617-1959*
Control cup spindle	Carbon steel	Designation C20 or C40 of IS : 2073-1962†
Clamps	Carbon steel	Type O of IS : 513-1963‡
Clamping screws and wing nuts	Carbon steel	Designation C20 or C40 of IS : 2073-1962†
Knob-spindle	Carbon steel	Designation C20 or C40 of IS : 2073-1962†
Knob	Wood	**Rosewood** (*Dalbergia latifolia* Roxb.) *or* **Teak** (*Tectona grandis* Linn. f.) *or* **Sissoo** (*Dalbergia sissoo* Roxb.) *or* **Dhaman** (*Grewia tiliæfolia* Vahl.) *or* **Bijasal** (*Pterocarpus marsupium* Roxb.) (*see also* IS : 399-1963§)

3. SHAPE AND DIMENSIONS

3.1 The general shape and dimensions of the steering appliance shall be as given in Fig. 1.

4. WORKMANSHIP AND FINISH

4.1 All components shall be finished smooth. They shall be free from burrs, pits, cracks, seams, scales and other surface flaws. The control cup casting shall be free from all castings flaws and shall be machined to give a smooth finish. The wooden knob shall rotate freely and without any jerks

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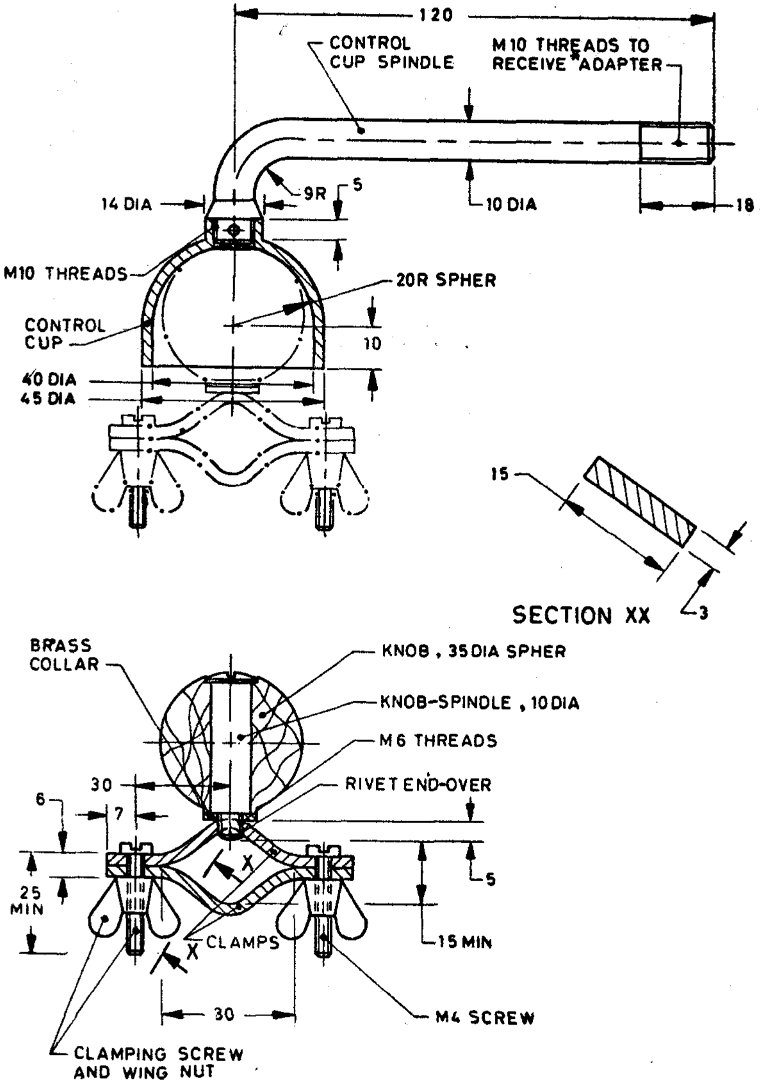
*Specification for aluminium and aluminium alloy ingots and castings for general engineering purposes (*revised*).

†Specification for carbon steel bars for production of machined parts for general engineering purposes.

‡Specification for cold rolled carbon steel sheets (*revised*).

§Classification of commercial timbers and their zonal distribution (*revised*).



*See IS : 4534-1968 Specification for adapter for terminal devices, artificial limbs.

All dimensions in millimetres.

Fig. 1 Steering Appliance for Artificial Limbs

about the knob-spindle. The knob-spindle shall be either riveted end-over or welded to the clamp. When this fitting is by riveting end-over, the screw on knob-spindle shall protrude, after completely screwing in, beyond the clamp surface by 1·5 mm before riveting. However, there shall be no play between the knob and the knob-spindle. Carbon steel components shall be plated chromium over nickel and the plating shall conform to Grade C of IS : 1068-1958*.

5. MARKING

5.1 The steering appliance shall be clearly and legibly marked with the manufacturer's name, initials or recognized trade-mark.

5.1.1 The appliance may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act, and the Rules and Regulations made thereunder. Presence of this mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard, under a well-defined system of inspection, testing and quality control during production. This system, which is devised and supervised by ISI and operated by the producer, has the further safeguard that the products as actually marketed are continuously checked by ISI for conformity to the standard. Details of conditions, under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

6. PACKING

6.1 The steering appliance shall be packed in the manner as agreed to between the purchaser and the supplier.

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*Specification for copper, nickel and chromium electroplated coatings.

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ON

Terminal Devices for Artificial Limbs

IS:		Rs
4534-1968	Adapter for terminal devices, artificial limbs	2·00
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INDIAN STANDARDS INSTITUTION

Headquarters

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 1

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534 Sardar Vallabhbhai Patel Road	Bombay 7	Telephone	35 69 44
5 Chowringhee Approach	Calcutta 13	..	23-18 23
Industrial Estate Administrative Building, Sanatnagar	Hyderabad 18	..	3 92 29
117/418 B Sarvodaya Nagar	Kanpur	..	3 76 95
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